IC 2001-2 TO AFI 13-201, AIR FORCE AIRSPACE MANAGEMENT

20 SEPTEMBER 2001

★SUMMARY OF REVISIONS

This change incorporates interim change (IC) 01-2. It adds Military Training Route (MTR) Surveys (Chapter 5). It also adds AFREP responsibility to attend joint FAA/DoD review conferences (1.3.2.17.); changes the reference to the speed authorization (1.9.) and deletes the conditions of the authorization (1.9.1. to 1.9.7.); adds MTR Survey schedules to the agenda of the unit Airspace/Range Committee (2.2.3.7.); and adds MTR Survey guidance to Attachment 5, SUA/MTR Review Checklist. See the last attachment of the publication, IC 01-2, for the complete IC. A star (★) indicates revision from the previous edition.

ADD TO CONTENTS
★Chapter 5--MILITARY TRAINING ROUTE SURVEYS

★1.3.2.17. (Added) Attend joint FAA/DoD review conferences IAW FAAO 7610.4, *Special Military Operations*.

★1.9. Exemption to Title 14 CFR Part 91.117 (Speed Authorization). Title 14 CFR Part 91.117 states that no person may operate an aircraft below 10,000 feet mean sea level (MSL) at an indicated airspeed of more than 250 knots. Recognizing DoD's aircraft performance requirement exceeds 250 knots, the FAA issued an exemption to this Title 14 CFR. It is not, however, a blanket waiver. Conditions under which operations are authorized below 10,000 feet MSL can be found in FAAO 7610.4, *Special Military Operations*.

Paragraphs 1.9.1. through 1.9.7. Deleted.

★2.2.3.7. (Added) MTR Survey schedule and results of surveys conducted since the last ARC. Include closed routes/segments and reason for the closure to include actions required to reopen any closed routes/segments.

★Chapter 5 (Added)

MILITARY TRAINING ROUTE SURVEYS

5.1. Military Training Route (MTR) Surveys. MTR surveys include route reviews, which have a management focus, and annual flight evaluations, which have an operational focus. Units will conduct annual route surveys of all MTRs in which they are designated the scheduling activity. MTRs with a floor at or below 1,500 feet AGL will be surveyed by the last day of the anniversary month of publication or within a year of the last survey. Failure to complete the survey in the prescribed time limits necessitates closing the route/segment unless waived by the MAJCOM or NAF (where the MAJCOM has delegated this responsibility to the NAF). All MTRs shall be surveyed across their entire route width and length and aircrew route briefing

guides updated to reflect areas of concern. Units will document and maintain route reviews and evaluations to include closure of items identified during surveys. Attachment 5, SUA/MTR Review Checklist, contains additional information required when reviewing MTRs.

5.2. Route Review. Route reviews should be conducted by the unit airspace manager using the Chart Updating Manual (CHUM), FLIP AP/1B, Sectional Aeronautical Charts, Tactical Pilotage Charts, and AP/1B Charts.

5.2.1. Route Reviews should consider the following:

5.2.1.1. Charted/uncharted obstacles or hazards within 100 feet of the MTR floor and within 2 NM of the lateral boundary

5.2.1.2. Entry/exit/route segment within 5 NM of public-use airports

5.2.1.3. Entry/exit/route segment within 5 NM of Class B, C, and D airspace. Also consider Class E airspace associated with non-towered airports and instrument approach procedures.

5.2.1.4. Entry/exit/route segment within 5 NM of airways and charted VFR flyways

5.2.1.5. Potential bird attractant areas within 2 NM of a route that may attract large concentrations of birds

5.2.1.6. Potential noise-sensitive areas within 3 NM of a route. Review areas where restrictions are identified to minimize the impact of noise.

5.2.1.7. Temporary Flight Restrictions (TFRs) established by FAA NOTAMs (i.e. forest and wild fires, DOI environmentally sensitive animal breeding areas and parachute jumping areas).

5.2.1.8. Other potential flight safety hazards

5.2.2. Route reviews should also verify the accuracy of aircrew route briefings and ensure MTR Special Operating Procedures or Remarks published in FLIP AP/1B are accurate and complete with the information identified in paragraphs 5.2.1.1. to 5.2.1.8. Review previous route evaluations to ensure any other previously identified findings have been appropriately addressed.

5.3. Route Evaluation. Route evaluations are intended as ongoing "operational" checks as to how a specific route is mission planned, entered, flown, and exited during day-to-day operations. Route evaluations are used to document uncharted/undocumented obstacles, environmentally sensitive areas, and other potential flight safety hazards, to include planning deficiencies and potential flight conflicts with other routes and Class A, B, C, and D airspace and air traffic service procedures. Data gathered during route evaluations are to be used to recommend changes to Air Force policy and procedures and to update in-flight guides, FLIP and other pertinent publications. Airspace managers should work with route schedulers and users to develop a local evaluation method to facilitate effective route evaluation by all route users. Also

include a method to document follow-up and corrective action taken to alleviate flight safety hazards identified during evaluations.

NOTE: There is no required frequency for these route evaluations. They should be accomplished by aircrew on an as needed basis based on actual operations where problems were encountered.

5.3.1. Annual Flight Evaluation. The annual flight evaluation complements the ongoing route evaluation program by continuing the "operational" check of the route. Because the annual flight evaluation is not completed under the same mission conditions (e.g. aircraft type, speed, required systems checks, etc) as the ongoing route evaluations, it is important that data collected by route evaluations are considered during the annual flight evaluation. This will ensure a comprehensive operational review. During route development and during the anniversary month after publication or within a year since the last flight evaluation, all MTRs shall be flight evaluated (MTR segments with a floor of 1,500 feet AGL or more need not be evaluated).

5.3.1.1. Failure to meet the annual suspense should preclude the use of MTRs until evaluation requirements are met, unless waived by the MAJCOM.

5.3.1.2. To allow more time for observation, the annual flight evaluations should be conducted at slow airspeeds. Evaluation aircraft should be either conventional or helicopter capable of slow airspeeds. Use of Civil Air Patrol, aero club, or contract/charter is encouraged. Should such aircraft be unobtainable, the evaluation should be conducted at the slowest operational airspeed consistent with the type of aircraft normally flying the route.

5.3.1.3. The route should be evaluated to ensure obstruction clearance at the minimum altitude usable for training. The evaluation aircrew should consider the route's minimum defined altitude when considering an obstacle's flight safety potential, as other units may train at lower altitudes. If possible, the airspace manager should act as an observer on as many evaluation flights as possible.

5.3.1.4. Flight evaluation crewmembers should be familiar with low-altitude flying and evaluation requirements. They should receive a pre-brief from the scheduling activity and provide a de-briefing to the scheduling activity.

5.3.1.5. The scheduling activity must ensure the necessary charts are available for the evaluation, develop an MTR survey schedule, and inform the AFREP of uncharted obstructions within 100 feet below the floor and within 2 NM of the lateral boundary of the MTR or any other hazards to air traffic affecting low-altitude navigation.

5.3.1.6. Routes less than 4 NM wide may require two passes, one each side of the centerline. Routes greater than 4 NM wide may require additional passes to complete an adequate evaluation. Route centerlines are established for charting and route width measuring purposes only and may not require a direct pass.

5.3.1.7. All users must be alert for new obstructions/hazards. Aircrews should be briefed to report any observed construction (e.g. temporary cranes, mines, temporary helipads, etc.) or uncharted obstructions/hazards to the scheduling activity/airspace manager. Information should include latitude and longitude coordinates and estimated height and description of obstructions/hazards.

NOTE: Professional judgment is the key to effective evaluations. Visual acuity may vary greatly and the parameters above are given as guidelines only. Evaluation aircrew must consider the impact of foliage; haze, clouds, fog contrast (light); airspeed/ground speed, terrain, snow and task saturation.

5.3.2. The evaluation aircrew should consider the following when conducting evaluations:

NOTE: Document a potential hazard's latitude and longitude for identification purposes. Provide an estimated or actual height of the obstruction if possible.

5.3.2.1. Accuracy, adequacy and availability of mission planning materials for the route

5.3.2.2. Accuracy and completeness of the aircrew route briefing

5.3.2.3. Potential hazards during entry and exit procedures, to include possible air traffic conflicts, air traffic control center/sector boundaries, possible communication problems, frequency congestion or task saturation

5.3.2.4. Obstacles not listed in the CHUM that should be listed.

5.3.2.5. Possible air traffic conflicts from public-use airports to include portions of the route within 5 NM of Class B, C, and D airspace. Also consider Class E airspace associated with non-towered airports and instrument approach procedures

5.3.2.6. Possible air traffic conflicts from airways, charted VFR flyways or practice areas and other MTRs

5.3.2.7. Potential for bird strikes from bird attractant areas to include known migratory routes

5.3.2.8. Built up areas showing new development (buildings) including evidence of mining activity

5.3.2.9. Environmentally sensitive areas not previously identified

5.3.2.10. Possible interference to NVG operations

5.3.2.11. Other potential flight safety hazards

5.3.3. The evaluation aircrew should return the evaluation form to the scheduling activity/airspace manager. Aircrews should also debrief the scheduling activity on specific observations and their potential to create conflicts and/or task saturation with flight operations.

5.4. Evaluation Results. Airspace managers must coordinate with schedulers and the senior operational commander on any route, or a segment of a route, found to contain potential flight safety hazards. An assessment of the hazard must be conducted prior to closing/reopening the route or route segment. Document corrective actions taken on the evaluation form.

5.4.1. Report uncharted obstacles on MTRs to the scheduling activity/airspace manager as soon as possible after landing. Airspace managers shall update uncharted obstacles, within 100 feet of the floor and within 2 NM of the lateral boundary of the MTR for inclusion in the Special Operating Procedures in FLIP AP/1B of the evaluated route.

5.4.2. Units shall remove all references to charted obstacles from the route Special Operating Procedures in FLIP AP/1B. Include uncharted obstacles in the aircrew route briefings.

5.5. FLIP AP/1B, Special Operating Procedures/Remarks. FLIP AP/1B provides text information and operating instructions for all MTRs, therefore, it's critical that units ensure information listed in FLIP AP/1B is complete and accurate. Originating and scheduling activities must ensure FLIP AP/1B identifies those procedures for the safe and efficient operation of aircraft on their respective MTRs. At a minimum, units shall include the following in Special Operating Procedures or Remarks:

5.5.1. Potential hazards during entry, exit and flying of the route. Include listing all Class B, C, and D airspace within 5 NM of the route. Include reference to the applicable Sectional Aeronautical Chart.

5.5.2. Unpublished/uncharted obstruction data pending publishing/charting

5.5.3. Route deconfliction procedures

5.5.4. Possible bird attractant areas and migratory routes

5.5.5. Noise and low-level flight sensitive areas

5.5.6. Other potential flight safety hazards

5.6. Aircrew Route Briefing Guides. Units shall prepare and maintain aircrew route briefing guides for each MTR for which they are the scheduling activity. Briefing guides will include any special operating procedures and/or constraints that are not covered in the current FLIP AP/1B.

ADD TO ABBREVIATIONS AND ACRONYMS

★DOI Department of Interior
★NM Nautical Mile
★NVG Night Vision Goggles

★A5.3.6. (Added) Does the unit initiate return of airspace to the National Airspace System when no longer required for mission accomplishment?

★A5.3.7. (Added) Are Military Radar Units used to provide military command and control in SUA to enhance safety and utility (when available)?

★A5.4.8. (Added) Is SUA released to other users when not needed for military operations?

★A5.5.4. (Added) Are joint-use restricted areas and their operating procedures outlined in a LOA/LOP?

★A.5.8.3. (Added) Is communication/radar coverage available with a military or FAA air traffic control agency when entering or exiting SUA/MTRs?

★A5.11.6. Does the SUA/MTR create potential for air traffic conflicts with terminal VFR and IFR operations?

★A5.11.7. Does the SUA/MTR create potential for air traffic conflicts with federal airways and regularly used VFR routes?